

**SECOND FIVE-YEAR REVIEW REPORT FOR
TAYLOR LUMBER AND TREATING SUPERFUND SITE
YAMHILL COUNTY, OREGON**



May 2017

Prepared by

**U.S. Environmental Protection Agency
Region 10
Seattle, Washington**

A handwritten signature in blue ink, appearing to read "Michael Szerlog", is written over a horizontal line.

**Michael Szerlog
Region 10 Acting Remedial Cleanup Program Manager**

5/11/17

Date

Table of Contents

LIST OF ABBREVIATIONS & ACRONYMS	3
I. INTRODUCTION	4
Site Background	4
FIVE-YEAR REVIEW SUMMARY FORM	6
II. RESPONSE ACTION SUMMARY	6
Basis for Taking Action	6
Response Actions	6
Status of Implementation	8
Systems Operations/Operation & Maintenance	12
III. PROGRESS SINCE THE LAST REVIEW	12
IV. FIVE-YEAR REVIEW PROCESS	12
Community Notification, Involvement & Site Interviews	12
Data Review	13
Site Inspection	13
V. TECHNICAL ASSESSMENT	15
QUESTION A: Is the remedy functioning as intended by the decision documents?	15
QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?	15
QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?	16
VI. ISSUES/RECOMMENDATIONS	16
OTHER FINDINGS	16
VII. PROTECTIVENESS STATEMENT	16
VIII. NEXT REVIEW	16
APPENDIX A – REFERENCE LIST	A-1
APPENDIX B – SITE CHRONOLOGY	B-1
APPENDIX C – SITE MAPS	C-1
APPENDIX D – SITE INSPECTION CHECKLIST	D-1
APPENDIX E – PRESS NOTICE	E-1
APPENDIX F – SITE INSPECTION PHOTOS	F-1
APPENDIX G – GROUNDWATER DATA	G-1

Tables

Table 1: Contaminants of Concern, by Media	8
Table 2: Summary of Planned and/or Implemented Institutional Controls (ICs)	9
Table 3: Protectiveness Determinations/Statements from the 2012 FYR	12
Table B-1: Site Chronology	B-1

Figures

Figure 1: Site Vicinity Map	5
Figure 2: Detailed Site Map	10
Figure 3: Institutional Control Map	11
Figure C-1: Pre-Remedy Site Photo	C-2
Figure C-2: Remedial Areas	C-3
Figure C-3: Monitoring Well Locations	C-4
Figure C-4: 2016 Groundwater Elevations	C-5
Figure C-5: 2016 Groundwater Results	C-6

LIST OF ABBREVIATIONS & ACRONYMS

BMP	Best Management Practices
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CIC	Community Involvement Coordinator
DEQ	Department of Environmental Quality
EPA	United States Environmental Protection Agency
FYR	Five-Year Review
HQ	Hazard Quotient
IC	Institutional Control
MCL	Maximum Contaminant Level
mg/kg	Milligrams per Kilogram
µg/kg	Micrograms per Kilogram
µg/L	Micrograms per Liter
ng/kg	Nanograms per Kilogram
NAPL	Non-Aqueous Phase Liquids
NCP	National Contingency Plan
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
O&F	Operational and Functional
O&M	Operation and Maintenance
OU	Operable Unit
PCP	Pentachlorophenol
PPA	Prospective Purchaser Agreement
PWPO	Pacific Wood Preserving of Oregon
RA	Remedial Action
RAO	Remedial Action Objective
RD	Remedial Design
ROD	Record of Decision
RPM	Remedial Project Manager
TEQ	Dioxin Toxic Equivalency
UU/UE	Unlimited Use/Unrestricted Exposure

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The U.S. Environmental Protection Agency (EPA) is preparing this FYR report pursuant to Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9621(c), consistent with the National Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) Section 300.430(f)(4)(ii), and taking into account EPA policy.

This is the second FYR for the Taylor Lumber and Treating Superfund site (the Site). The triggering action for this statutory review is the completion date of the previous FYR report. This FYR has been undertaken due to the fact that hazardous substances, pollutants or contaminants remain at the Site above levels that allow for unlimited use and unrestricted exposure (UU/UE). The Site consists of one operable unit (OU).

The FYR was led by EPA remedial project manager (RPM) Joe Wallace. Participants included Oregon Department of Environmental Quality (DEQ) project manager Norman Read, and Ryan Burdge and Emily Chi from EPA contractor Skeo. The property owner, McFarland Cascade, was notified of the initiation of the FYR. A site inspection occurred on 12/13/16. Interviews were conducted on 12/12/16 and 12/13/16.

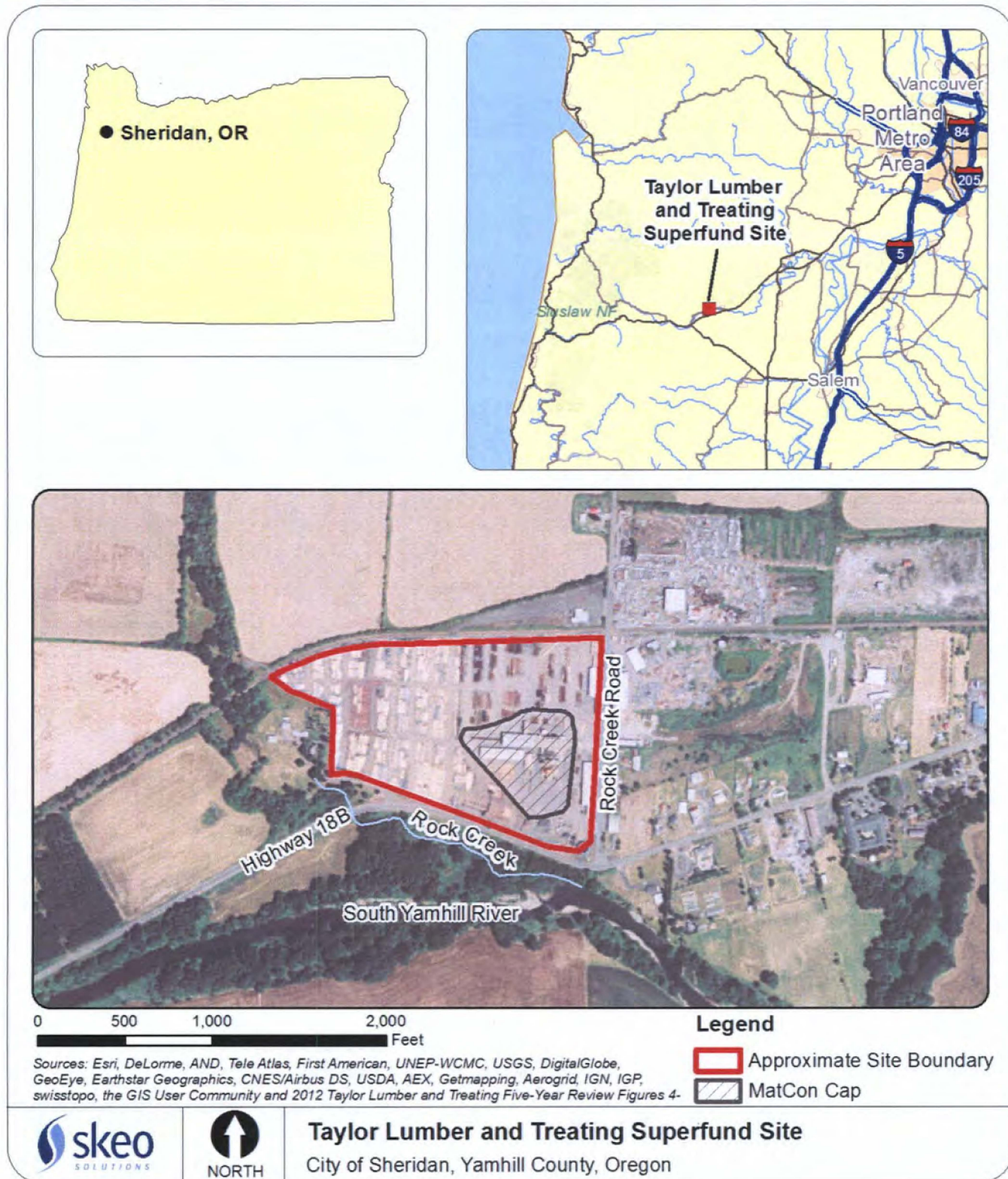
Site Background

The Site is located at 22125 Southwest Rock Creek Road, about 1 mile west of Sheridan in Yamhill County, Oregon (Figure 1). Taylor Lumber operated a sawmill and wood treating facility at the Site from 1946 to 2001. Wood-treating operations commenced in 1966 and consisted mostly of the treatment of logs for utility poles and pilings. The primary wood-treating chemicals included creosote, pentachlorophenol (PCP) and Chemonite (a solution of arsenic, copper, zinc and ammonia). All operations ceased when Taylor Lumber filed for bankruptcy in 2001.

In 2002, Pacific Wood Preserving of Oregon (PWPO), now McFarland Cascade, entered into a Prospective Purchaser Agreement (PPA) with the EPA and purchased the facility. PWPO did not assume any CERCLA liability when it began wood-treating operations in June 2002, but agreed to perform operations and maintenance (O&M) for cleanup actions taken at the Site in accordance with the PPA. The PPA required, among other things, that PWPO not treat wood with solutions containing ammoniacal copper zinc arsenate, chromate copper arsenate, PCP, creosote or any arsenical wood-preserving compounds. In 2011, the PPA was modified to allow PWPO to treat wood using PCP. In November 2013, PWPO was purchased by McFarland Cascade who has continued wood-treating operations and is bound by the obligations under the PPA, as modified.

The Site is zoned for industrial uses and is expected to remain in industrial use. Current and expected future land uses in the surrounding area include recreational, residential, commercial and industrial uses. There is no current or anticipated future use of groundwater at the Site. Groundwater at the Site flows in a southern direction toward the South Yamhill River, which is approximately 150 feet from the Site. There is no off-site groundwater contamination. Surface water also drains via ditches toward Rock Creek and the South Yamhill River. For more information, Appendix A includes a list of documents reviewed during this FYR. Appendix B includes a chronology of events that have occurred at the Site.

Figure 1: Site Vicinity Map



FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: TAYLOR LUMBER AND TREATING		
EPA ID: ORD009042532		
Region: 10	State: OREGON	City/County: SHERIDAN/YAMHILL
SITE STATUS		
NPL Status: Final		
Multiple OUs? No	Has the site achieved construction completion? Yes	
REVIEW STATUS		
Lead agency: EPA		
Author name: Joe Wallace, with additional support provided by Skeo		
Author affiliation: EPA Region 10		
Review period: 8/1/2016 - 5/15/2017		
Date of site inspection: 12/13/2016		
Type of review: Statutory		
Review number: 2		
Triggering action date: 5/15/2012		
Due date (five years after triggering action date): 5/15/2017		

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

Site investigations identified contaminants, including dioxins, PCP and arsenic, in surface and subsurface soils and in shallow groundwater resulting from historical wood treating processes. The need for remediation was based on the results of human health and ecological risk assessments, which found that the greatest risks to human health and the environment were through direct contact, ingestion, and inhalation of contaminated soils and groundwater.

Response Actions

Early cleanup efforts at the Site included paving part of the treatment area, removing areas of arsenic and collocated dioxin contamination from the roadside ditches, and installing a barrier wall (bentonite slurry) to contain non-aqueous phase liquids (NAPL) beneath the treatment area. The ground surface enclosed by the barrier wall was paved, and a groundwater extraction system was constructed within the barrier wall to maintain an

inward hydraulic gradient (for more detail, see Appendix C). Contaminated soil from various pre-existing stockpiles, in addition to soil resulting from interim action activities, was consolidated and moved in 2000 to soil storage cells located in the northwest corner of the Site.

In November 2004, the EPA conducted a removal action at the residence located directly east of the PWPO property. Surface soil contaminated with arsenic, pentachlorophenol, and dioxins were excavated from the front and side yards and replaced with clean topsoil and grass. Approximately 510 tons of materials were removed and disposed of at an off-site landfill. In the summer of 2005, the EPA conducted a second removal action by excavating soils from a drainage ditch adjacent to the residence. Excavated soils from the ditch (approximately 138 cubic yards) were consolidated at the Site and later addressed as part of the final remedy.

The EPA issued a Record of Decision (ROD) for the Site on September 30, 2005. The ROD establishes the following remedial action objectives (RAOs):

- Prevent migration of NAPL and contaminated groundwater to outside of the barrier wall.
- Restrict human exposure to groundwater with contaminant concentrations that exceed federal drinking water standards both inside and outside the barrier wall.
- Minimize future migration of contaminated groundwater to adjacent surface water (Rock Creek, South Yamhill River) to protect ecological receptors.
- Reduce or eliminate human exposure through direct contact (incidental soil ingestion, skin contact with soil and inhalation of dust) with contaminated soils that exceed protective regulatory levels.
- Reduce or eliminate risks to ecological receptors from contaminated soils in ditches.

Remedial components required by the ROD include:

- Excavation or capping and consolidation of contaminated soils.
- Continued operation and maintenance (O&M) of the underground barrier wall system at the Site, including continuing extraction and treatment of groundwater from within the slurry wall.
- Replacement of the existing 4.6-acre asphalt cap, which covers the soils contained inside the existing slurry wall, with a low-permeability cap more durable to industrial activity eliminating human exposure contact with contaminated soils.
- Long-term monitoring of groundwater.
- Implementation of institutional controls for land use and groundwater use.

The ROD sets cleanup and action levels for arsenic in soils and PCP in groundwater (Table 1).

Table 1: Contaminants of Concern, by Media

Media	Contaminant of Concern	Basis
Surface and subsurface soil	Arsenic (159 mg/kg)	Risk-based value for industrial worker scenario
Groundwater	PCP (1.0 µg/L)	Maximum Contaminant Level (MCL)
<i>Notes:</i> Cleanup of soils is driven by human health risk from arsenic and dioxins. The extent of the remedial action was guided by arsenic cleanup levels and a cleanup level for dioxins was not set. Because dioxins are co-located with arsenic, it follows that the remedy will also concurrently address dioxin contamination. mg/kg = milligrams per kilogram µg/L = micrograms per liter		

Status of Implementation

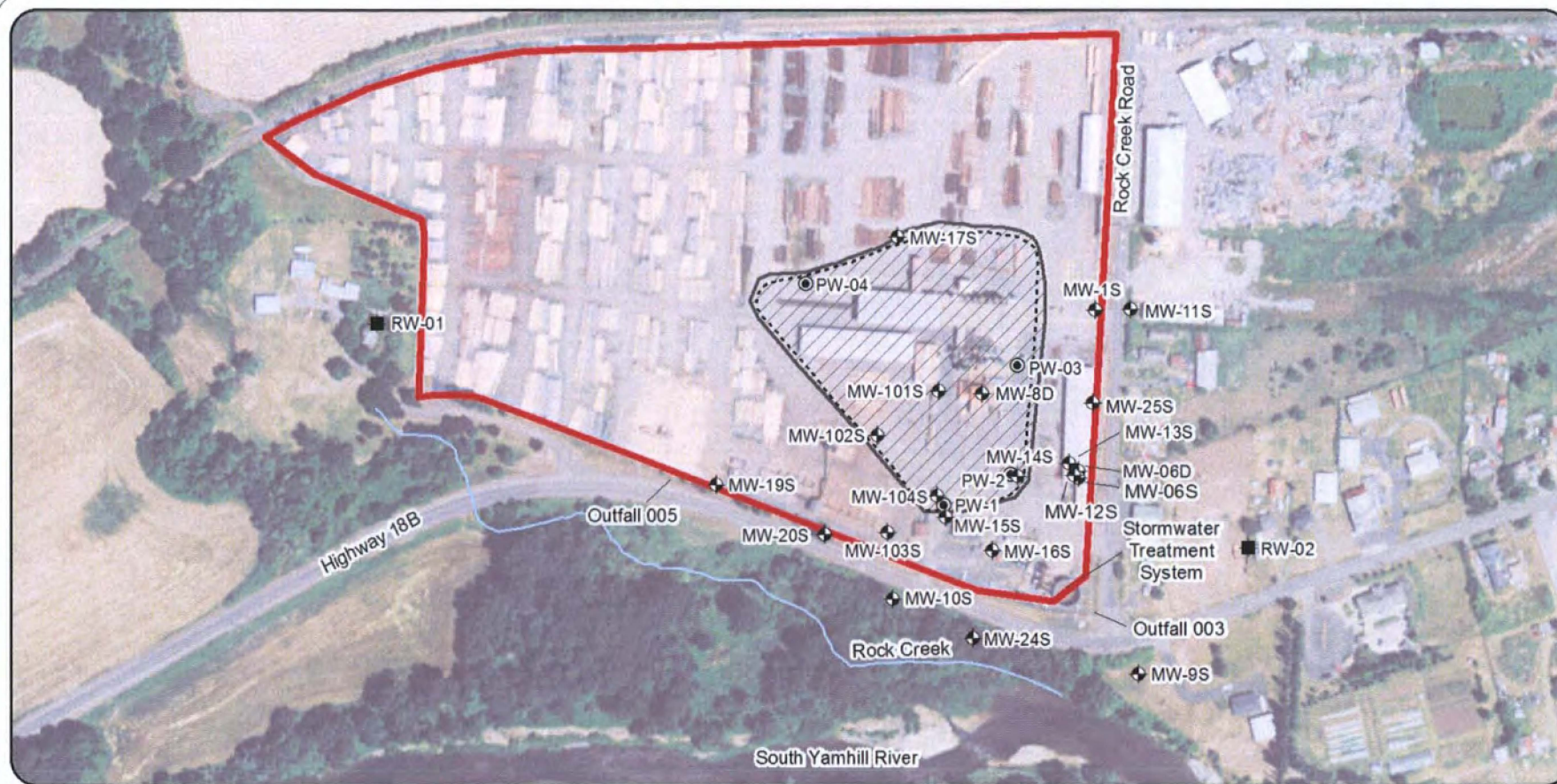
With the exception of groundwater extraction and treatment, EPA completed the remedial action in March 2010, after conducting the following remedial activities:

- Contaminated soils were excavated from nearly 5 acres of the Site and soils were disposed of off-site at a hazardous waste landfill.
- All adjacent roadside ditches and two ditches flowing to the South Yamhill River were cleaned and restored.
- The existing asphalt cap in the wood-treating area was replaced with a new, low-permeability MatCon asphalt cap.
- Soils in the historic stockpiled soil storage cells were disposed of offsite.
- Groundwater monitoring wells no longer in use were permanently closed.
- Institutional controls were implemented (Table 2 and Figure 3).

Table 2: Summary of Planned and/or Implemented Institutional Controls (ICs)

Media, Engineered Controls, and Areas that Do Not Support UU/UE based on Current Conditions	ICs Needed	ICs Called for in the Decision Documents	Impacted Parcel(s)	IC Objective	Title of IC Instrument Implemented and Date (or planned)
Groundwater	Yes	Yes	Sitewide	Restrict installation of groundwater wells and groundwater use.	Easement and Equitable Servitude, July 2011
Soil	Yes	Yes	Sitewide	Restrict any activities that could damage the MatCon cap. Prohibit non-industrial use of the property.	Easement and Equitable Servitude, July 2011

Figure 2: Detailed Site Map



0 250 500 1,000 Feet

Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, the GIS User Community, 2012 Taylor Lumber and Treating Five-Year Review Figure 4-2 and 2016 Annual Groundwater Monitoring Report Figure 1.

Legend

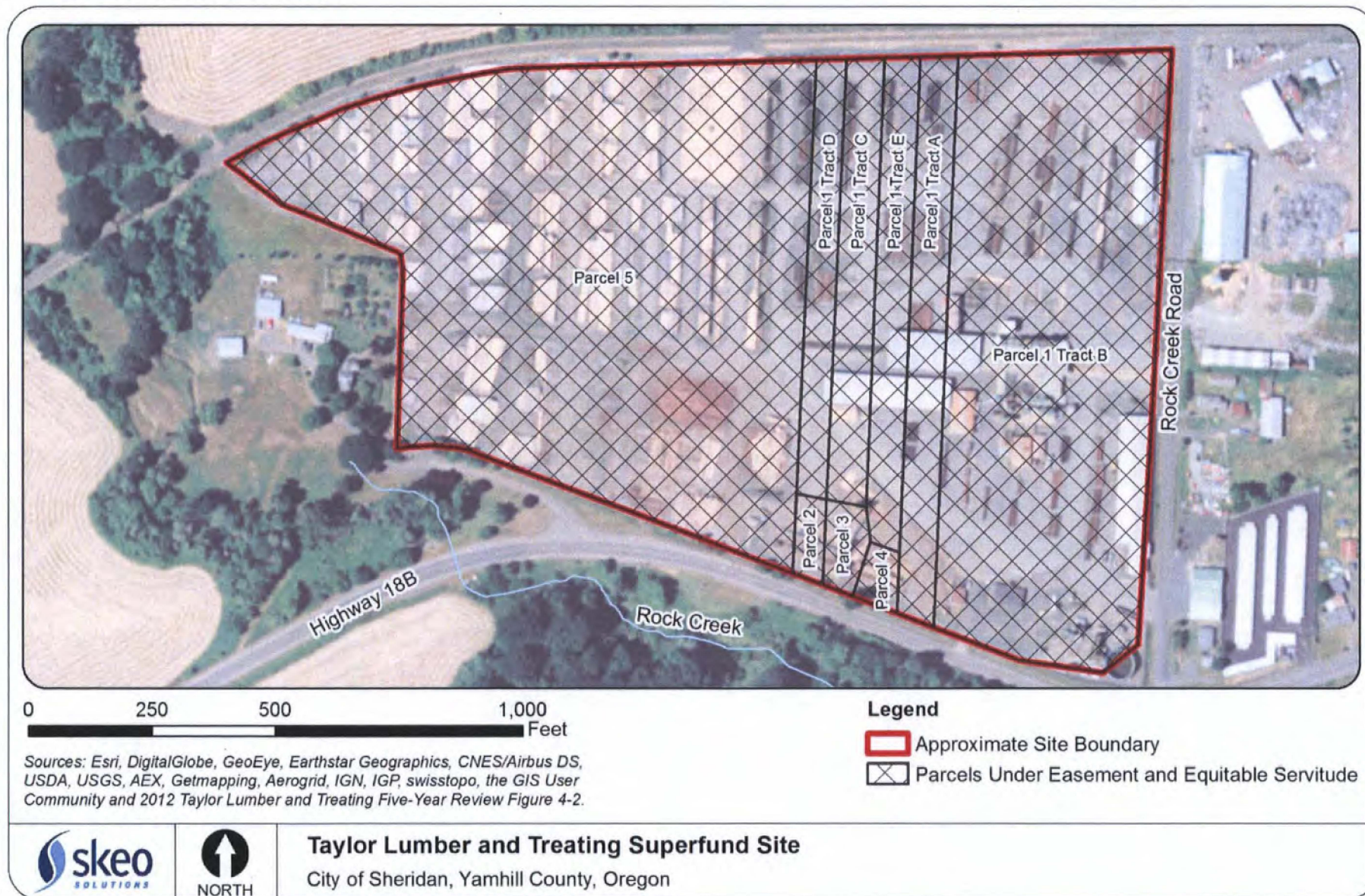
- Approximate Site Boundary
- MatCon Cap
- Slurry Wall
- Monitoring Well
- Extraction Well
- Residential Well



Taylor Lumber and Treating Superfund Site
City of Sheridan, Yamhill County, Oregon

Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Figure 3: Institutional Control Map



Disclaimer: This map and any boundary lines within the map are approximate and subject to change. The map is not a survey. The map is for informational purposes only regarding EPA's response actions at the Site.

Systems Operations/Operation & Maintenance

The EPA determined that the remedy was operational and functional (O&F) on September 30, 2009. Since the O&F determination, Oregon DEQ has been responsible for ensuring that O&M activities, including groundwater monitoring, are carried out at the Site. The O&M plan is up to date.

The 2011 modification to the PPA sets forth certain obligations for McFarland Cascade to collect and treat groundwater from inside the slurry wall, maintain the existing low-permeability MatCon asphalt cap, implement a Best Management Practices Plan, and submit annual environmental audit reports to EPA until January 31, 2022, or for as long as McFarland Cascade owns or operates on the site property, whichever is later. Further, all modifications to the property are required to be submitted to Oregon DEQ, and a soil management plan is to be developed as needed. Also, any damages or requests to penetrate the MatCon cap are to be submitted to Oregon DEQ for approval. In addition, Oregon DEQ conducts annual inspections to assess the condition and integrity of the MatCon cap.

III. PROGRESS SINCE THE LAST REVIEW

This section includes the protectiveness determinations and statements from the last FYR. There were no issues or recommendations in the last FYR report.

Table 3: Protectiveness Determinations/Statements from the 2012 FYR

OU #	Protectiveness Determination	Protectiveness Statement
1	Protective	The remedial action construction is complete and the remedy is functioning as intended. The remedy is protective of human health and the environment and exposure pathways that would result in unacceptable risks are being controlled by institutional controls and restrictive covenants.

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Involvement & Site Interviews

A public notice was made available by a newspaper posting in the *Yamhill Valley News-Register* on 11/29/2016 (Appendix E). It stated that the FYR was underway and invited the public to submit any comments to the EPA. No comments were received. A copy of this FYR report will be made available at the Site's information repository, located at Sheridan Public Library, 142 NW Yamhill St, Sheridan, Oregon, 97378, and at the EPA Record Center located at 1200 6th Ave, Seattle WA 98101.

During the FYR process, interviews were conducted to document any perceived problems or successes with the remedy that has been implemented to date. The property owners reported no concerns with the remedy. O&M is ongoing and they are in regular communication with Oregon DEQ regarding any actions that affect the MatCon cap or stormwater treatment system. The City Manager, the Grand Ronde Ceded Lands Program Manager, and nearby residents did not express any concerns about the remedy, but they appreciate that monitoring is ongoing to ensure the Yamhill River is not contaminated by the Site.

Data Review

Groundwater samples are collected from 18 monitoring wells and one residential well and analyzed for PCP during annual monitoring events (Appendix C). The April 2016 groundwater analytical results, as well as historical analytical results, are included in Appendix G. The wells graphed in Appendix G are those used to evaluate long-term concentration trends in Site perimeter and off-site wells, and to confirm that PCP in groundwater has not migrated south to the South Yamhill River or to the east under Rock Creek Road.

Overall, the data suggest an inward gradient is being maintained and that PCP is not migrating to the South Yamhill River. PCP has not been detected in residential water well RW-01 since it was initially sampled in 1999.¹ PCP concentrations in the 2016 samples were generally low or non-detect with the exception of MW-25S (158 µg/L). PCP concentrations in MW-25S have historically been elevated, but have shown a consistently decreasing trend since its initial sampling in 2005. Data from the most recent sampling event in 2016 show that PCP concentrations in all other monitoring wells are below the 1.0 µg/L cleanup level except: MW-15S, 4.19 µg/L (J); MW-16S, 3.2 µg/L (J); and MW-103S, 1.36 µg/L (J) (Appendix G).

Concentrations in MW-11S (east of Rock Creek Road) have decreased from 0.87 µg/L in April 2011 to non-detect since April 2012. While concentrations of PCP in well MW-11S have historically varied between detections slightly over reporting limits and having no detectable PCP, there have been no significant increases in PCP concentrations in MW-11S indicating no migration to the east.

Stormwater is discharged from two outfalls, Outfalls 003 and 005, under an NPDES discharge permit issued by Oregon DEQ. Currently, all treated effluent from the treatment system is discharged via Outfall 003 into the South Yamhill River at River Mile 38.9. Discharge exceedances are reported to Oregon DEQ and are managed under state oversight. At the time of this FYR, the facility had experienced occasional exceedances of its permitted discharge limits and is actively developing a corrective action plan to prevent additional exceedances. Outfall 005 receives untreated stormwater runoff collected from the western portion of the Site and discharges into the facility perimeter ditch, which then drains into Rock Creek. McFarland Cascade monitors both Outfalls 003 and 005 in accordance with the NPDES discharge permit.

Site Inspection

A site inspection took place on 12/13/2016. In attendance were EPA RPM Joe Wallace, Oregon DEQ Project Manager Norman Read, Grand Ronde Ceded Lands Program Manager Michael Karnosh, several McFarland Cascade personnel, and Ryan Burdge and Emily Chi from Skeo. The purpose of the inspection was to assess the protectiveness of the remedy. The completed site inspection checklist, attendee list, and photographs are available in Appendices D and F.

Participants walked the entire facility and observed the removal areas, stormwater conveyances, monitoring wells, the MatCon cap and the stormwater treatment system. MW-17S could not be located during the inspection. It appeared unlikely to be obscured by site materials, suggesting it may have been paved over in the past. The inspection also noted the recently employed bunk log storage atop the MatCon cap. Oregon DEQ and McFarland Cascade had previously assessed the bunks in a trial period and found no undue stress on the MatCon cap. No additional issues were noted during the inspection.

The Sheridan library was not open during the inspection and the availability of site documents at that location could not be confirmed. However a follow-up phone call confirmed the continued availability of pertinent site

¹ EPA determined that groundwater sampling of RW-02 will not occur in future groundwater monitoring efforts implemented by Oregon DEQ. In April 2011, the property owner of the well pump at RW02 indicated that the well pump has been out of operation for several years. The residence is connected to the municipal water supply. Lack of data for this well does not affect evaluation of the groundwater conceptual site model since the residential wells were only being sampled as a precautionary measure and no contamination was previously identified in this non-drinking water well.

documents at the library. The EPA will provide the repository with a disc of this FYR report and additional relevant site documents.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes. Construction of the remedial action is complete, the 2010 O&M plan is approved and being fully implemented, the 2010 long-term groundwater monitoring plan is approved and monitoring efforts are ongoing, and results show that the remedy is functioning as intended. Groundwater monitoring data indicate that contaminant concentrations generally are stable or show decreasing trends over time outside of the barrier wall. Institutional controls are in place and effective for all areas of the Site, and the institutional controls are tailored to the use restrictions specified in the decision documents.

The PPA signed by the EPA and PWPO (now McFarland Cascade) was amended in 2011. The 2011 PPA Amendment sets forth obligations for McFarland Cascade to collect and treat groundwater from inside the slurry wall, maintain the existing low-permeability MatCon asphalt cap, implement a Best Management Practices Plan, and submit annual environmental audit reports to EPA until January 31, 2022, or for as long as the McFarland Cascade owns or operates on the property, whichever is later.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels and RAOs used at the time of the remedy selection still valid?

Yes, the exposure assumptions, toxicity data, cleanup levels and RAOs for this project are still valid and protective. The soil remedy addressed contamination above risk-based concentrations for industrial land use. Site conditions have not significantly changed since issuance of the ROD.

The ROD for the Site did not identify a soil cleanup level for dioxins as it was determined the arsenic cleanup would address the co-located dioxin. Since the ROD, toxicity data for dioxins have changed. EPA's dioxin reassessment has been developed and undergone review for many years, with the participation of scientific experts in EPA and other federal agencies, as well as scientific experts in the private sector and academia. The Agency followed current guidelines and incorporated the latest data and physiological/biochemical research into the reassessment. On February 17, 2012, the EPA released the final human health non-cancer dioxin reassessment, publishing an oral non-cancer toxicity value, or reference dose (RfD), of 7×10^{-10} mg/kg-day for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in EPA's Integrated Risk Information System (IRIS). The dioxin cancer reassessment will follow thereafter. The dioxin RfD was approved for immediate use at Superfund sites to ensure protection of human health.

Data collected suggest that there is a high likelihood that the excavation of soils which resulted in 'near background' concentrations of arsenic would have also removed any actionable dioxin contamination. Furthermore, based on a review of dioxin concentrations in surface soils collected during the Site's remedial investigation and feasibility study, the maximum concentration left in place was 724 nanograms per kilogram (ng/kg) dioxin toxic equivalency (TEQ), which slightly exceeds the current industrial screening level of 720 ng/kg dioxin TEQ. Given current site conditions, even with the new toxicity information, the remedy remains protective for current and reasonably anticipated future land uses. In addition, institutional controls on the property limit the future use of the property to industrial use only.

Sampling of off-site residences in 2002 found one property east of the facility with elevated levels of dioxins in soil, with a maximum detection of 638 ng/kg dioxin TEQ. In 2004 and 2005, EPA conducted a removal actions at the front yard of the property and an adjacent drainage ditch. EPA removed six inches of surface soil in all areas where elevated dioxins, PCP and arsenic were found and replaced the soil with clean fill, sod, and gravel. Although confirmation sampling for dioxins was unavailable for this FYR, because the contaminants are derived from airborne sources, are strongly sorbed onto soil, and are not generally mobile, there is strong evidence that the removal action addressed all dioxin contamination. In addition, later sampling of the property backyard found dioxins concentrations comparable to background levels.

Of the remaining off-site residences sampled in 2002, EPA found a maximum dioxin concentration of 46 ng/kg and therefore did not conduct removal actions at these properties. The 2002 concentrations are below the current EPA residential screening level of 51 ng/kg. Therefore, concentrations left in place in off-site soils do not pose an unacceptable risk and remain protective for residential land use.

On site, the remedy removed substantial quantities of contaminated soil and replaced these areas with clean gravel. The asphalt cap serves to impede the infiltration of stormwater into the groundwater in the area encompassed by the barrier wall and protects people from direct contact with contaminated soils within the barrier wall.

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No, no other information has come to light that could call into question the protectiveness of the remedy.

VI. ISSUES/RECOMMENDATIONS

Issues/Recommendations
OU(s) without Issues/Recommendations Identified in the FYR: OU1

OTHER FINDINGS

The following recommendations were identified during the FYR but do not affect current and/or future protectiveness:

- PCP concentrations in MW-25S remain elevated, but have shown a consistently decreasing trend since the well's initial sampling in 2005. Continued monitoring is needed to ensure continued decreasing trend.
- MW-17S could not be located during the inspection. It appeared unlikely to be obscured by site materials, suggesting it may have been paved over in the past. EPA will direct McFarland Cascade to further search for and determine the status of MW-17S, at which time a determination of further action then be determined.

VII. PROTECTIVENESS STATEMENT

Protectiveness Statement(s)
<i>Operable Unit: 1</i> <i>Protectiveness Determination:</i> Protective
<i>Protectiveness Statement:</i> The remedy is protective of human health and the environment and the environment and exposure pathways that could result in unacceptable risks are being controlled.

VIII. NEXT REVIEW

The next FYR report for the Site is required five years from the completion date of this review.

APPENDIX A – REFERENCE LIST

Apex Companies, LLC (Apex), 2016. 2016 Annual Groundwater Monitoring Report. Taylor Lumber and Treating Superfund Site, Sheridan, Oregon. May 22, 2016.

Belunes Consulting, Inc. 2012 Environmental Audit Report – Final Pacific Wood Preserving of Oregon, Sheridan, Oregon. March 2013.

CH2MHill, 2003. Remedial Investigation Report. Taylor Lumber and Treating Superfund Site, Sheridan, Oregon Volume I. October 2003.

CH2MHill, 2009. Final Construction Report. Taylor Lumber and Treating Superfund Site, Sheridan, Oregon. March 2009.

U.S. Environmental Protection Agency (EPA), 2005. Final Record of Decision. Taylor Lumber and Treating Superfund Site, Sheridan, Oregon. September 30, 2005.

EPA, 2010. Long-term Groundwater Monitoring and Reporting Plan. Taylor Lumber and Treating Superfund Site. March 2010.

EPA, 2012. First Five-Year Review. Taylor Lumber and Treating Superfund Site. May 15, 2012.

APPENDIX B – SITE CHRONOLOGY

Table B-1: Site Chronology

Event	Date
EPA discovered contamination at the property	August 01, 1979
Property owners completed a removal action	October 31, 2000
EPA listed site on NPL	June 14, 2001
EPA completed off-site removal action at residential property	November 21, 2004
EPA completed removal action in off-site drainage ditch	July 28, 2005
EPA issued Record of Decision (ROD)	September 30, 2005
EPA completed Remedial Investigation and Feasibility Study (RI/FS)	
EPA completed Remedial Design (RD) - Final Design Basis Report, Construction Quality Assurance Plan, Soil Sampling and Analysis Plan, Construction Schedule, and Final Design Specifications and Drawings	December 2006
Remedial action start date	April 06, 2007
On-site construction start	May 15, 2007
First annual inspection of MatCon asphalt cap	August 11, 2008
EPA Preliminary Close Out Report and Construction Completion	September 24, 2008
Final Remedial Action Report	March 2010
Amended Prospective Purchaser Agreement (Amendment to Agreement and Covenant not to Sue, Docket CERCLA-10-2002-0034; PWPO and EPA)	May 26, 2011(Effective Date)
Amended Prospective Purchaser Agreement (PWPO and Oregon DEQ)	June 7, 2011 (Effective Date)
Property owner recorded Easement and Equitable Servitude	July 29, 2011 (Date Recorded)
Sitewide Ready for Anticipated Reuse Certification	August 23, 2011
PWPO Final 2012 Environmental Audit Report	April 26, 2012
PWPO Final BMP Plan	May 4, 2012
EPA issued first FYR report	May 15, 2012
Contractor completed stiffness test of MatCon cap	January 2013
McFarland Cascade purchased property	November 2013
Oregon DEQ completed assessment of bunk storage system on the MatCon cap	November 6, 2014

APPENDIX C – SITE MAPS

Figure C-1: Pre-Remedy Site Photo



LEGEND

- EXCAVATION AREAS, DESIGN LIMITS
- DITCH EXCAVATION AREAS
- EXCAVATION AREAS, AS-BUILT LIMITS
- ABDN ABANDONED MONITORING WELL
- ALTERED MONITOR WELL AND EXTRACTION WELL VAULTS WERE RAISED TO MATCH FINISHED GRADE OF LOW PERMEABILITY ASPHALT OVERLAY; EXTRACTION WELL PW-1, PW-2 AND PW-3 COVERS WERE REPLACED.

RAILROAD DITCH WEST (RRD-W), EXCAVATED 1-FOOT SEDIMENT, DISPOSED OFFSITE (SUBTITLE C), BACKFILLED DITCH WITH EROSION PROTECTION ROCK

RAILROAD DITCH EAST (RRD-E), EXCAVATED 1-FOOT SEDIMENT, DISPOSED OFFSITE (SUBTITLE C), BACKFILLED DITCH WITH EROSION PROTECTION ROCK

MONITOR WELL MW-21S (ABDN) N 53591.26 E 7447129.88

CELL 1

CELL 2

CELL 3

TPS-1 2.87 ACRES

TPS-2 1.88 ACRES

AS-BUILT EXCAVATION LIMITS

DESIGN EXCAVATION LIMITS

EXCAVATED CONTAMINATED SOIL AVERAGE 1.8 FEET, DISPOSED OFFSITE (SUBTITLE C), BACKFILLED AND GRADED

NEW 12" RCP CULVERT

EXCAVATED CONTAMINATED SOIL AVERAGE 2.4 FEET, DISPOSED OFFSITE (SUBTITLE C), BACKFILLED AND GRADED

STOCKPILED SOIL STORAGE AREA, DISPOSED OFFSITE (SUBTITLE D), EXCAVATED STOCKPILED SOIL AND 6" OF SOIL BENEATH BOTTOM LAYER, GRADED TO DRAIN 8" OF ROCK SURFACING ADDED BY PWPO

SOIL SCREENING AND STOCKPILE AREA, EXCAVATED MIN 3" SOIL AFTER STOCKPILE SOIL WAS REMOVED AND DISPOSED OFFSITE (SUBTITLE C), GRAVEL BACKFILL PLACED TO RESTORE AREA TO ORIGINAL GRADE

EXCAVATED CONTAMINATED SOIL AVERAGE 1-FOOT, DISPOSED OFFSITE (SUBTITLE C), BACKFILLED AND GRADED

WPS, 6.4 ACRES

ROCK CREEK GULLY (RCG), EXCAVATED 1-FOOT SURFACE SOIL, DISPOSED OFFSITE (SUBTITLE C), RESTORED GULLY

SEDIMENT REMOVED FROM HWY 188 CULVERTS

HIGHWAY DITCH (HWYD), EXCAVATED SEDIMENT FROM DITCH, DISPOSED OFFSITE (SUBTITLE C), BACKFILLED AND RESTORED DITCH WITH EROSION CONTROL MATTING AND HYDROSEED

SEDIMENT REMOVED FROM HWY 188 CULVERT

ERRS CONTRACTOR REPLACED CULVERT AND EXCAVATED CONTAMINATED SOIL FROM DITCH AND GULLY

CONNECTED STORM DRAIN ACROSS BARRIER WALL

ROCK CREEK ROAD DITCH (RCRD), EXCAVATED SEDIMENT, DISPOSED OFFSITE (SUBTITLE C), BACKFILLED DITCH WITH EROSION PROTECTION ROCK

BARRIER WALL

RRD-EAST, PLACED EROSION PROTECTION ROCK

MONITOR WELL MW-23S (ABDN) N 535227.18 E 7441425.17

REPLACED ASPHALT CAP WITH APPROX 0.37 ACRES LOW PERMEABILITY ASPHALT CAP

REPLACED OPEN SWALES WITH CONCRETE TRENCH DRAINS

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)

MONITOR WELL MW-48 (ABDN)

MONITOR WELL MW-101S (ALTERED)

MONITOR WELL MW-102S (ALTERED)

MONITOR WELL MW-20 (ABDN)

MONITOR WELL MW-2S (ABDN)

MONITOR WELL MW-14S (ALTERED)

MONITOR WELL MW-104S (ALTERED)

MONITOR WELL MW-23S (ABDN)

MONITOR WELL MW-21S (ABDN)

MONITOR WELL MW-18S (ABDN)</

Legend:

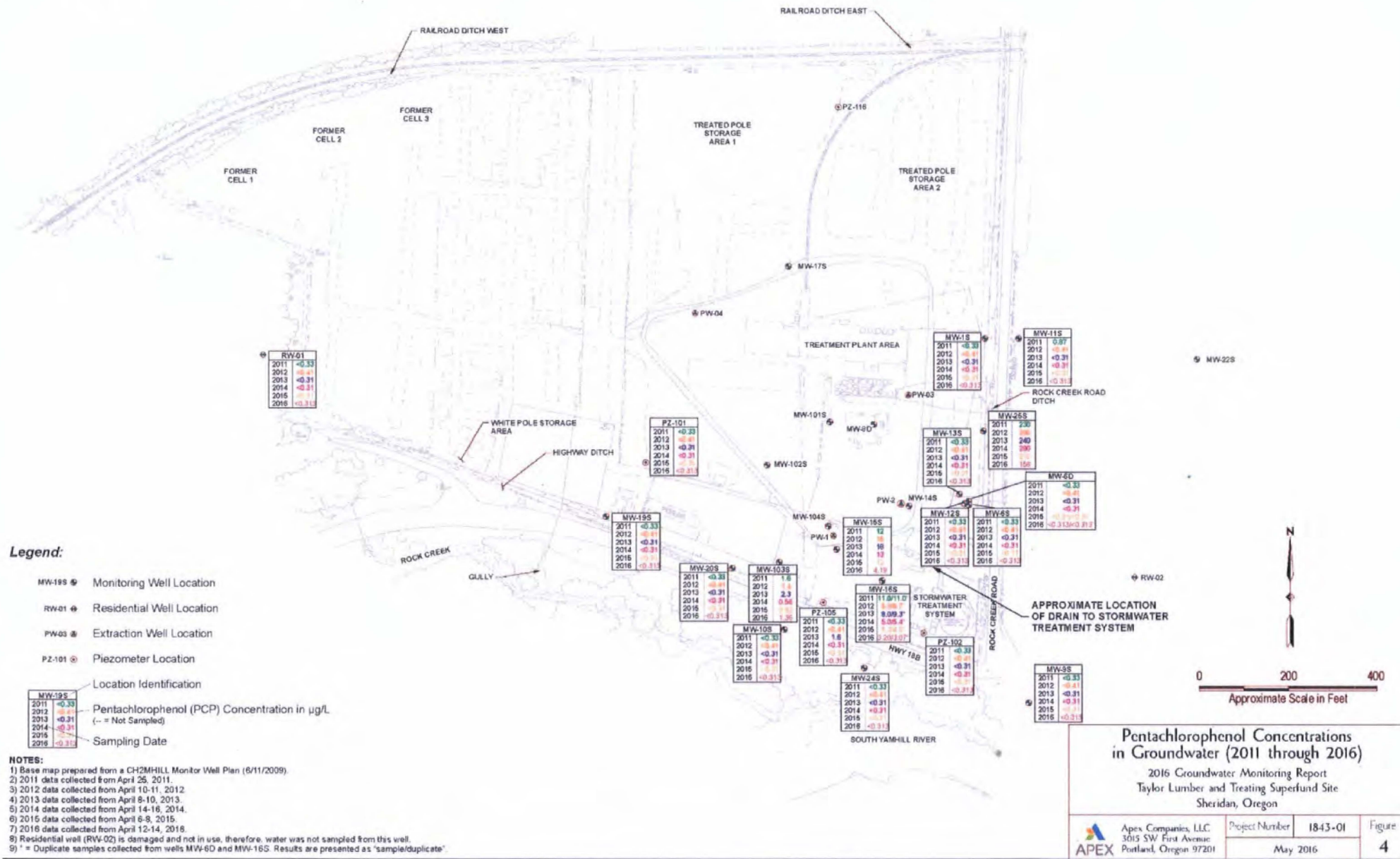
- MW-19S ● Monitoring Well Location
- 204.36 Groundwater Elevation in Feet Above Mean Sea Level (MSL)
- (200.84) Groundwater Elevation Not Used for Contouring
- Water Well Measurement Not Included in Scope of Work
- Groundwater Elevation Contour in Feet (MSL)
- RW-01 ● Residential Well Location
- PW-03 ● Extraction Well Location
- PZ-101 ● Piezometer Location
- Barrier Wall

NOTE: Base map prepared from a CH2MHILL Monitor Well Plan (6/11/2009).

Groundwater Elevation Contour Map
 (April 12, 2016)
 2016 Groundwater Monitoring Report
 Taylor Lumber and Treating Superfund Site
 Sheridan, Oregon

Apex Companies, LLC 3015 SW First Avenue Portland, Oregon 97201	Project Number 1843-01	Figure 3
May 2016		

Figure C-5: 2016 Groundwater Results



APPENDIX D – SITE INSPECTION CHECKLIST

FIVE-YEAR REVIEW SITE INSPECTION CHECKLIST			
I. SITE INFORMATION			
Site Name: TAYLOR LUMBER AND TREATING		Date of Inspection: <u>12/13/2016</u>	
Location and Region: Sheridan, OREGON 10		EPA ID: ORD009042532	
Agency, Office or Company Leading the Five-Year Review: <u>EPA, with support from Skeo</u>		Weather/Temperature: <u>Overcast, 40 degrees</u>	
Remedy Includes: (Check all that apply) <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 48%;"> <input type="checkbox"/> Landfill cover/containment <input type="checkbox"/> Access controls <input checked="" type="checkbox"/> Institutional controls <input checked="" type="checkbox"/> Groundwater pump and treatment <input checked="" type="checkbox"/> Surface water collection and treatment <input type="checkbox"/> Other: _____ </div> <div style="width: 48%;"> <input type="checkbox"/> Monitored natural attenuation <input checked="" type="checkbox"/> Groundwater containment <input checked="" type="checkbox"/> Vertical barrier walls </div> </div>			
Attachments: <input checked="" type="checkbox"/> Inspection team roster attached <input type="checkbox"/> Site map attached			
II. INTERVIEWS (check all that apply)			
1. O&M Site Manager <u>Don Hoffman</u> <u>Plant Manager</u> <u>12/13/2016</u> <div style="display: flex; justify-content: space-between; margin-top: -10px;"> Name Title Date </div> Interviewed <input checked="" type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone: <u>503-843-2122</u> Problems, suggestions <input type="checkbox"/> Report attached: _____			
2. O&M Staff _____ _____ _____ <div style="display: flex; justify-content: space-between; margin-top: -10px;"> Name Title Date </div> Interviewed <input type="checkbox"/> at site <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone: _____ Problems/suggestions <input type="checkbox"/> Report attached: _____			
3. Local Regulatory Authorities and Response Agencies (i.e., state and tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices). Fill in all that apply. <div style="margin-top: 10px;"> Agency <u>Oregon DEQ</u> Contact <u>Norman Read</u> <u>Project</u> <u>12/13/2016</u> <u>541-687-7348</u> <div style="display: flex; justify-content: space-between; margin-top: -10px;"> Name Manager Date Phone No. </div> Title _____ Problems/suggestions None <input type="checkbox"/> Report attached: _____ </div> <div style="margin-top: 20px;"> Agency _____ Contact _____ Name _____ Title _____ Date _____ Phone No. _____ Problems/suggestions <input type="checkbox"/> Report attached: _____ </div> <div style="margin-top: 20px;"> Agency _____ Contact _____ Name _____ Title _____ Date _____ Phone No. _____ Problems/suggestions <input type="checkbox"/> Report attached: _____ </div> <div style="margin-top: 20px;"> Agency _____ Contact _____ Name _____ Title _____ Date _____ Phone No. _____ Problems/suggestions <input type="checkbox"/> Report attached: _____ </div>			

Agency _____ Contact _____ <div style="display: flex; justify-content: space-between; margin-top: 5px;"> Name _____ Title _____ Date _____ Phone No. _____ </div> Problems/suggestions <input type="checkbox"/> Report attached: _____	
4. Other Interviews (optional) <input type="checkbox"/> Report attached: _____	
III. ON-SITE DOCUMENTS AND RECORDS VERIFIED (check all that apply)	
1. O&M Documents <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 30%;"> <input checked="" type="checkbox"/> O&M manual <input checked="" type="checkbox"/> As-built drawings <input checked="" type="checkbox"/> Maintenance logs </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date </div> <div style="width: 30%;"> <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A </div> </div> Remarks: _____	
2. Site-Specific Health and Safety Plan <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 45%;"> <input checked="" type="checkbox"/> Readily available <input type="checkbox"/> Contingency plan/emergency response plan </div> <div style="width: 10%;"> <input type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date </div> <div style="width: 45%;"> <input type="checkbox"/> N/A <input type="checkbox"/> N/A </div> </div> Remarks: _____	
3. O&M and OSHA Training Records <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 45%;"> <input checked="" type="checkbox"/> Readily available </div> <div style="width: 10%;"> <input checked="" type="checkbox"/> Up to date </div> <div style="width: 45%;"> <input type="checkbox"/> N/A </div> </div> Remarks: _____	
4. Permits and Service Agreements <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 30%;"> <input checked="" type="checkbox"/> Air discharge permit <input checked="" type="checkbox"/> Effluent discharge <input type="checkbox"/> Waste disposal, POTW <input type="checkbox"/> Other permits: _____ </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available <input type="checkbox"/> Readily available <input type="checkbox"/> Readily available </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date <input type="checkbox"/> Up to date <input type="checkbox"/> Up to date </div> <div style="width: 30%;"> <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A </div> </div> Remarks: _____	
5. Gas Generation Records <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 45%;"> <input type="checkbox"/> Readily available </div> <div style="width: 10%;"> <input type="checkbox"/> Up to date </div> <div style="width: 45%;"> <input checked="" type="checkbox"/> N/A </div> </div> Remarks: _____	
6. Settlement Monument Records <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 45%;"> <input type="checkbox"/> Readily available </div> <div style="width: 10%;"> <input type="checkbox"/> Up to date </div> <div style="width: 45%;"> <input checked="" type="checkbox"/> N/A </div> </div> Remarks: _____	
7. Groundwater Monitoring Records <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 45%;"> <input checked="" type="checkbox"/> Readily available </div> <div style="width: 10%;"> <input checked="" type="checkbox"/> Up to date </div> <div style="width: 45%;"> <input type="checkbox"/> N/A </div> </div> Remarks: _____	
8. Leachate Extraction Records <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 45%;"> <input type="checkbox"/> Readily available </div> <div style="width: 10%;"> <input type="checkbox"/> Up to date </div> <div style="width: 45%;"> <input checked="" type="checkbox"/> N/A </div> </div> Remarks: _____	
9. Discharge Compliance Records <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div style="width: 30%;"> <input checked="" type="checkbox"/> Air <input checked="" type="checkbox"/> Water (effluent) </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Readily available <input checked="" type="checkbox"/> Readily available </div> <div style="width: 30%;"> <input checked="" type="checkbox"/> Up to date <input checked="" type="checkbox"/> Up to date </div> <div style="width: 30%;"> <input type="checkbox"/> N/A <input type="checkbox"/> N/A </div> </div> Remarks: _____	

10.	Daily Access/Security Logs	<input checked="" type="checkbox"/> Readily available	<input checked="" type="checkbox"/> Up to date	<input type="checkbox"/> N/A
Remarks: _____				
IV. O&M COSTS				
1.	O&M Organization			
	<input checked="" type="checkbox"/> State in-house	<input type="checkbox"/> Contractor for state		
	<input checked="" type="checkbox"/> PRP in-house	<input type="checkbox"/> Contractor for PRP		
	<input type="checkbox"/> Federal facility in-house	<input type="checkbox"/> Contractor for Federal facility		
	<input type="checkbox"/> _____			
2.	O&M Cost Records			
	<input type="checkbox"/> Readily available	<input type="checkbox"/> Up to date		
	<input type="checkbox"/> Funding mechanism/agreement in place	<input checked="" type="checkbox"/> Unavailable		
	Original O&M cost estimate: _____ <input type="checkbox"/> Breakdown attached			
	Total annual cost by year for review period if available			
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached
Date		Date	Total cost	
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached
Date		Date	Total cost	
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached
Date		Date	Total cost	
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached
Date		Date	Total cost	
	From: _____	To: _____	_____	<input type="checkbox"/> Breakdown attached
Date		Date	Total cost	
3.	Unanticipated or Unusually High O&M Costs during Review Period			
	Describe costs and reasons: <u>None noted</u>			
V. ACCESS AND INSTITUTIONAL CONTROLS <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A				
A. Fencing				
1.	Fencing Damaged	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Gates secured	<input checked="" type="checkbox"/> N/A
	Remarks: <u>Site is fenced along East and South property boundaries, adjacent to public roadways.</u>			
B. Other Access Restrictions				
1.	Signs and Other Security Measures	<input type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> N/A	
	Remarks: <u>Signs clearly visible at entry gates</u>			
C. Institutional Controls (ICs)				

1. Implementation and Enforcement			
Site conditions imply ICs not properly implemented		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A
Site conditions imply ICs not being fully enforced		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A
Type of monitoring (e.g., self-reporting, drive by): <u>Annual Audit Inspection</u>			
Frequency: <u>1/yr</u>			
Responsible party/agency: <u>State of Oregon</u>			
Contact	<u>Norman Read</u>	Project Manager	<u>N/AN/A</u> <u>541-687-7348</u>
	Name	Title	Date Phone no.
	Reporting is up to date	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A
	Reports are verified by the lead agency	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A
	Specific requirements in deed or decision documents have been met	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A
	Violations have been reported	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> N/A
Other problems or suggestions: <input type="checkbox"/> Report attached			
2. Adequacy <input checked="" type="checkbox"/> ICs are adequate <input type="checkbox"/> ICs are inadequate <input type="checkbox"/> N/A			
Remarks: <u>IC violation reported 7/29/11</u>			
D. General			
1. Vandalism/Trespassing <input type="checkbox"/> Location shown on site map <input checked="" type="checkbox"/> No vandalism evident			
Remarks: _____			
2. Land Use Changes On Site <input checked="" type="checkbox"/> N/A			
Remarks: _____			
3. Land Use Changes Off Site <input checked="" type="checkbox"/> N/A			
Remarks: _____			
VI. GENERAL SITE CONDITIONS			
A. Roads <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1. Roads Damaged <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Roads adequate <input checked="" type="checkbox"/> N/A			
Remarks: _____			
B. Other Site Conditions			
Remarks: <u>No issues noted.</u>			
VII. LANDFILL COVERS <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
A. Landfill Surface			
1. Settlement (low spots) <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Settlement not evident			
Aerial extent: _____		Depth: _____	
Remarks: _____			
2. Cracks <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Cracking not evident			
Lengths: _____		Widths: _____	
Depths: _____		Remarks: _____	

3.	Erosion Arial extent: _____ Remarks: _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> Erosion not evident Depth: _____	
4.	Holes Arial extent: _____ Remarks: _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> Holes not evident Depth: _____	
5.	Vegetative Cover <input type="checkbox"/> No signs of stress Remarks: _____	<input type="checkbox"/> Grass <input type="checkbox"/> Trees/shrubs (indicate size and locations on a diagram) <input type="checkbox"/> Cover properly established	
6.	Alternative Cover (e.g., armored rock, concrete) Remarks: _____	<input type="checkbox"/> N/A	
7.	Bulges Arial extent: _____ Remarks: _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> Bulges not evident Height: _____	
8.	Wet Areas/Water Damage <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> Wet areas <input type="checkbox"/> Ponding <input type="checkbox"/> Seeps <input type="checkbox"/> Soft subgrade Remarks: _____ </div> <div style="width: 30%;"> <input type="checkbox"/> Wet areas/water damage not evident <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map <input type="checkbox"/> Location shown on site map </div> <div style="width: 30%;"> Arial extent: _____ Arial extent: _____ Arial extent: _____ Arial extent: _____ </div> </div>		
9.	Slope Instability <input type="checkbox"/> No evidence of slope instability Arial extent: _____ Remarks: _____	<input type="checkbox"/> Slides <input type="checkbox"/> Location shown on site map	
B. Benches <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A (Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)			
1.	Flows Bypass Bench Remarks: _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay	
2.	Bench Breached Remarks: _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay	
3.	Bench Overtopped Remarks: _____	<input type="checkbox"/> Location shown on site map <input type="checkbox"/> N/A or okay	
C. Letdown Channels <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A (Channel lined with erosion control mats, riprap, grout bags or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)			

1.	Settlement (Low spots) <input type="checkbox"/> Location shown on site map Arial extent: _____ Remarks: _____	<input type="checkbox"/> No evidence of settlement Depth: _____
2.	Material Degradation <input type="checkbox"/> Location shown on site map Material type: _____ Remarks: _____	<input type="checkbox"/> No evidence of degradation Arial extent: _____
3.	Erosion <input type="checkbox"/> Location shown on site map Arial extent: _____ Remarks: _____	<input type="checkbox"/> No evidence of erosion Depth: _____
4.	Undercutting <input type="checkbox"/> Location shown on site map Arial extent: _____ Remarks: _____	<input type="checkbox"/> No evidence of undercutting Depth: _____
5.	Obstructions Type: _____ <input type="checkbox"/> No obstructions <input type="checkbox"/> Location shown on site map Arial extent: _____ Size: _____ Remarks: _____	
6.	Excessive Vegetative Growth Type: _____ <input type="checkbox"/> No evidence of excessive growth <input type="checkbox"/> Vegetation in channels does not obstruct flow <input type="checkbox"/> Location shown on site map Arial extent: _____ Remarks: _____	
D. Cover Penetrations <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A		
1.	Gas Vents <input type="checkbox"/> Active <input type="checkbox"/> Passive <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs maintenance <input type="checkbox"/> N/A Remarks: _____	
2.	Gas Monitoring Probes <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs maintenance <input type="checkbox"/> N/A Remarks: _____	
3.	Monitoring Wells (within surface area of landfill) <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition <input type="checkbox"/> Evidence of leakage at penetration <input type="checkbox"/> Needs maintenance <input type="checkbox"/> N/A Remarks: _____	
4.	Extraction Wells Leachate <input type="checkbox"/> Properly secured/locked <input type="checkbox"/> Functioning <input type="checkbox"/> Routinely sampled <input type="checkbox"/> Good condition	

	<input type="checkbox"/> Evidence of leakage at penetration	<input type="checkbox"/> Needs maintenance	<input type="checkbox"/> N/A
Remarks: _____			
5.	Settlement Monuments	<input type="checkbox"/> Located	<input type="checkbox"/> Routinely surveyed <input type="checkbox"/> N/A
Remarks: _____			
E. Gas Collection and Treatment <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	Gas Treatment Facilities		
	<input type="checkbox"/> Flaring	<input type="checkbox"/> Thermal destruction	<input type="checkbox"/> Collection for reuse
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance	
Remarks: _____			
2.	Gas Collection Wells, Manifolds and Piping		
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance	
Remarks: _____			
3.	Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings)		
	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs maintenance	<input type="checkbox"/> N/A
Remarks: _____			
F. Cover Drainage Layer <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	Outlet Pipes Inspected	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
Remarks: _____			
2.	Outlet Rock Inspected	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
Remarks: _____			
G. Detention/Sedimentation Ponds <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	Siltation	Area extent: _____	Depth: _____ <input type="checkbox"/> N/A
	<input type="checkbox"/> Siltation not evident		
Remarks: _____			
2.	Erosion	Area extent: _____	Depth: _____
	<input type="checkbox"/> Erosion not evident		
Remarks: _____			
3.	Outlet Works	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
Remarks: _____			
4.	Dam	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
Remarks: _____			
H. Retaining Walls <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	Deformations	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Deformation not evident
	Horizontal displacement: _____	Vertical displacement: _____	
	Rotational displacement: _____		
Remarks: _____			

2.	Degradation	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Degradation not evident
Remarks: _____			
I. Perimeter Ditches/Off-Site Discharge <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1.	Siltation	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Siltation not evident
Area extent: _____		Depth: _____	
Remarks: _____			
2.	Vegetative Growth	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A
<input type="checkbox"/> Vegetation does not impede flow			
Area extent: _____		Type: _____	
Remarks: _____			
3.	Erosion	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Erosion not evident
Area extent: _____		Depth: _____	
Remarks: _____			
4.	Discharge Structure	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A
Remarks: _____			
VIII. VERTICAL BARRIER WALLS <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	Settlement	<input checked="" type="checkbox"/> Location shown on site map	<input checked="" type="checkbox"/> Settlement not evident
Area extent: _____		Depth: _____	
Remarks: _____			
2.	Performance Monitoring Type of monitoring: <u>Water levels</u>		
<input type="checkbox"/> Performance not monitored			
Frequency: <u>1/yr</u>		<input type="checkbox"/> Evidence of breaching	
Head differential: <u>5 feet (2016 Environmental Audit Report 1/31/17)</u>			
Remarks: _____			
IX. GROUNDWATER/SURFACE WATER REMEDIES <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			
A. Groundwater Extraction Wells, Pumps and Pipelines <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			
1.	Pumps, Wellhead Plumbing and Electrical		
<input checked="" type="checkbox"/> Good condition <input checked="" type="checkbox"/> All required wells properly operating <input type="checkbox"/> Needs maintenance <input type="checkbox"/> N/A			
Remarks: _____			
2.	Extraction System Pipelines, Valves, Valve Boxes and Other Appurtenances		
<input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance			
Remarks: _____			
3.	Spare Parts and Equipment		
<input checked="" type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided			
Remarks: _____			
B. Surface Water Collection Structures, Pumps and Pipelines <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A			

1.	Collection Structures, Pumps and Electrical <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance Remarks: _____
2.	Surface Water Collection System Pipelines, Valves, Valve Boxes and Other Appurtenances <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance Remarks: _____
3.	Spare Parts and Equipment <input checked="" type="checkbox"/> Readily available <input type="checkbox"/> Good condition <input type="checkbox"/> Requires upgrade <input type="checkbox"/> Needs to be provided Remarks: _____
C. Treatment System <input checked="" type="checkbox"/> Applicable <input type="checkbox"/> N/A	
1.	Treatment Train (check components that apply) <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Metals removal <input type="checkbox"/> Air stripping <input type="checkbox"/> Filters: _____ <input type="checkbox"/> Additive (e.g., chelation agent, flocculent): _____ <input type="checkbox"/> Others: _____ </div> <div> <input type="checkbox"/> Oil/water separation <input checked="" type="checkbox"/> Carbon adsorbers <input type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance <input checked="" type="checkbox"/> Sampling ports properly marked and functional <input checked="" type="checkbox"/> Sampling/maintenance log displayed and up to date <input checked="" type="checkbox"/> Equipment properly identified </div> <div> <input type="checkbox"/> Bioremediation <input type="checkbox"/> Quantity of groundwater treated annually: ~ 440,000 gal. (2016) <input type="checkbox"/> Quantity of surface water treated annually: ~ 24,800,000 gal. (2016) </div> </div> Remarks: <u>Pumped groundwater and surface water runoff from process area combined and treated in accordance with Oregon DEQ NPDES Permit.</u>
2.	Electrical Enclosures and Panels (properly rated and functional) <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance Remarks: _____
3.	Tanks, Vaults, Storage Vessels <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Proper secondary containment <input type="checkbox"/> Needs maintenance Remarks: _____
4.	Discharge Structure and Appurtenances <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Good condition <input type="checkbox"/> Needs maintenance Remarks: _____
5.	Treatment Building(s) <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/> Good condition (esp. roof and doorways) <input type="checkbox"/> Needs repair <input type="checkbox"/> Chemicals and equipment properly stored Remarks: _____

6. Monitoring Wells (pump and treatment remedy)	
<input checked="" type="checkbox"/> Properly secured/locked <input type="checkbox"/> All required wells located	<input checked="" type="checkbox"/> Functioning <input type="checkbox"/> Needs maintenance <input checked="" type="checkbox"/> Routinely sampled <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Good condition
Remarks: <u>Well MW-17S was not located. It was possibly covered or has been paved over.</u>	
D. Monitoring Data	
1. Monitoring Data	
<input checked="" type="checkbox"/> Is routinely submitted on time	<input checked="" type="checkbox"/> Is of acceptable quality
2. Monitoring Data Suggests:	
<input checked="" type="checkbox"/> Groundwater plume is effectively contained	<input checked="" type="checkbox"/> Contaminant concentrations are declining
E. Monitored Natural Attenuation	
1. Monitoring Wells (natural attenuation remedy)	
<input type="checkbox"/> Properly secured/locked <input type="checkbox"/> All required wells located	<input type="checkbox"/> Functioning <input type="checkbox"/> Needs maintenance <input type="checkbox"/> Routinely sampled <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Good condition
Remarks: _____	
X. OTHER REMEDIES	
If there are remedies applied at the site and not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.	
XI. OVERALL OBSERVATIONS	
A. Implementation of the Remedy	
Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is designed to accomplish (e.g., to contain contaminant plume, minimize infiltration and gas emissions). <u>The remedy is functioning as intended. Groundwater monitoring data indicate no migration of contaminants outside of the barrier wall or off site. Institutional controls are in place and effective for all areas of the Site, and the institutional controls are tailored to the use restrictions specified in the decision documents.</u>	
B. Adequacy of O&M	
Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy. <u>No issues noted. The state indicated the property owners are responsive and are managing the site well.</u>	
C. Early Indicators of Potential Remedy Problems	
Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromised in the future. <u>None noted.</u>	
D. Opportunities for Optimization	
Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy. <u>None noted.</u>	

Inspection Attendee List

Andy Morgan	MCHI	Director of Western Operations
Don Hoffman	MCHI-Sheridan	Plant Manager
Andy Whisenhunt	MCHI-Sheridan	Production Manager
Ted Smith	Stella-Jones/MCHI	Senior Environmental Manager
Roland Mueller	Stella-Jones/MCHI	EHS Manager
Norman Read	Oregon DEQ	Project Manager
Michael Karnosh	Grand Ronde Tribe	Ceded Lands Program Manager
Joe Wallace	EPA Region 10	Project Manager
Ryan Burdge	Skeo	Project Manager
Emily Chi	Skeo	Assistant Project Manager

APPENDIX E – PRESS NOTICE



Cleanup Measures Reviewed for McFarland Cascade Holdings Facility in Sheridan, OR Formerly Taylor Lumber and Treating

We Want to Hear From You
As someone interested in or living close to the site, we want to keep you informed. Also you may know of or have observed things that can help our review team. If you have information or concerns about the Taylor Site that you would like us to consider during our review, please contact Joe Wallace, EPA Project Manager, no later than January 15, 2017.

Contact Information:
Joe Wallace (206) 553-4470
Wallace.joe@epa.gov

Attend the Public Meeting
When: December 12, 2016
9:00 am to noon
Where: City Council Chambers
120 SW Mill Street
Sheridan OR 97378

More Information Is Available
Prior Five-Year Reviews, site information, and other documents are available.

Online:
<https://yosemite.epa.gov/r10/cleanup.nsf/sites/tlt>

And at these locations:
Sheridan Public Library
142 NW Yamhill Street
Sheridan OR 97378
(503) 843-3420

U.S. EPA Region 10
Superfund Record Center
1200 Sixth Avenue, Suite 900
Seattle WA 98101
(206) 553-4494
1-800-424-4372 ext. 4494

Background

The U.S. Environmental Protection Agency will begin its second Five-Year Review (FYR) of the environmental cleanup at the Taylor Lumber Superfund Site in December, 2016. The Taylor Lumber Site is a wood treatment facility currently owned by Stella-Jones, Inc. and operated by McFarland Cascade Holdings, Inc. The Site is located on 34 acres of land in Sheridan, Oregon and has been in operation since 1946.

Public Meeting Planned

An informal Public Meeting will be held on December 12, 2016 to conduct interviews, hear concerns from the public or others, and to answer questions about the Taylor Lumber Site. All are welcome to attend.

Previous Actions at the Site

The EPA issued a Record of Decision cleanup plan (ROD) for the Taylor Lumber Site in 2005. Prior to the issuance of the ROD, a removal action was conducted by EPA which addressed remediation of contaminated source materials. This action included:

- Identifying the extent of soil and groundwater contamination;
- installing a slurry wall to contain contaminated soils and groundwater;
- constructing an asphalt cap over the contaminated soils and groundwater to prevent rainfall infiltration, and
- installing four groundwater extraction wells within the slurry wall to hydraulically contain contaminated groundwater.

The ROD also called for removal of contaminated soils in area ditches, improving the 4.6 acre asphalt cap, and implementation of an Operations and Maintenance Plan and a Long Term Groundwater Monitoring Plan.

Five-Year Review

The previous 2012 Five-Year Review confirmed that construction of all remedial actions is complete, the operation and maintenance plan is approved and fully functional, the long-term groundwater monitoring plan is approved and monitoring is ongoing and that the remedy is functioning as intended. The next (Second) Five-Year Review report is scheduled to be available to the public on October 1, 2017.

We provide reasonable accommodation to people with disabilities. If you need a reasonable accommodation, please notify Joe Wallace at Wallace.joe@epa.gov, or 206-553-4770.

TDD or TTY users please call the Federal Relay Service at 1-800-877-8339 and give the operator Joe Wallace's number (206) 553-4470.

APPENDIX F –SITE INSPECTION PHOTOS



Bunk storage system.



Stormwater capture drain.



PZ-101.



New truck entrance.



East-facing view of timber storage.



Division of untreated and treated timber storage.



Edge of MatCon cap, marked with yellow paint.



Area outside cap under construction.
Leaking water line replacement.



Paint indicating centerline of barrier wall.



Stormwater treatment system.



Outfall 005.



MW-10S.

APPENDIX G –GROUNDWATER DATA

Table 1
Groundwater Monitoring Program
Taylor Lumber and Treating

Well I.D.	Wells to be Sampled	Water Level Measurements*
Outside Barrier Wall		
MW-1S	X	X
MW-6S	X	X
MW-6D	X	X
MW-12S	X	X
MW-13S	X	X
MW-15S	X	X
MW-16S	X	X
MW-19S	X	X
MW-20S	X	X
MW-25S	X	X
MW-103S	X	X
PZ-101	X	X
PZ-102	X	X
PZ-105	X	X
South of Highway 18B		
MW-9S	X	X
MW-10S	X	X
MW-24S	X	X
East of Rock Creek Road		
MW-11S	X	X
Residences**		
RW-01	X	
Extraction Wells Inside Barrier Wall		
PW-1		X
PW-02		X
PW-03		X
PW-04		X

Notes:

- * = Indicates wells in which water level measurements will be collected.
- ** = Residential addresses and contact information are as follows.
RW- 01: 31100 West Valley Highway - Residential property owned by Bob Bowman - 503-843-2530
MW-9S: Residential property owned by Robert and Patricia Harris - 503-472-8017
MW-11S: Northwest Gazebo - George Gabriel owner - 503-843-0024

Table 2
Groundwater Elevation Results
Taylor Lumber and Treating

Well Number/ (Top of Casing Elevation)	Date of Measurement	Depth to Water (feet below top of casing)	Groundwater Elevation (feet)
Outside Barrier Wall			
MW-1S (207.41)	4/12/2016	3.65	203.76
MW-6S (204.39)	4/12/2016	2.72	201.67
MW-6D (204.04)	4/12/2016	3.20	200.84
MW-12S (204.49)	4/12/2016	3.08	201.41
MW-13S (204.92)	4/12/2016	3.54	201.38
MW-15S (204.68)	4/12/2016	3.06	201.62
MW-16S (205.19)	4/12/2016	3.11	202.08
MW-19S (210.44)	4/12/2016	6.08	204.36
MW-20S (208.87)	4/12/2016	7.07	201.80
MW-25S (208.74)	4/12/2016	6.65	202.09
MW-103S (207.62)	4/12/2016	4.69	202.93
PZ-101 (208.48)	4/12/2016	4.08	204.40
PZ-102 (204.02)	4/12/2016	4.39	199.63
PZ-105 (205.94)	4/12/2016	4.70	201.24
South of Highway 18B			
MW-9S (204.04)	4/12/2016	8.09	195.95
MW-10S (203.17)	4/12/2016	10.24	192.93
MW-24S (205.49)	4/12/2016	13.79	191.70
East of Rock Creek Road			
MW-11S (207.27)	4/12/2016	3.42	203.85
Extraction Wells Inside Barrier Wall			
PW-1 (203.93)	4/12/2016	6.75	197.18
PW-02 (204.96)	4/12/2016	8.80	196.16
PW-03 (206.3)	4/12/2016	10.49	195.81
PW-04 (206.98)	4/12/2016	11.29	195.69

Table 3
Groundwater Analytical Results
Taylor Lumber and Treating

Well ID	Date of Measurement	Pentachlorophenol (µg/L)
Outside Barrier Wall		
MW-1S	5/1/1999*	—
	Feb-02	<25
	May-02	6.9
	Aug-02	14
	Nov-02	14
	Feb-03	6.0 J
	May-03	3.3
	4/27/2011	<0.33
	4/10/2012	<0.41 J4, J3
	4/9/2013	<0.31
	4/15/2014	<0.31
	4/7/2015	<0.31
	4/13/2016	<0.313
MW-6S	May-99	<25
	Feb-02	0.82
	May-02	0.88
	Aug-02	1.0
	Nov-02	0.88 J
	Feb-03	—
	May-03	—
	4/26/2011	<0.33
	4/26/2011 DUP	<0.33
	4/10/2012	<0.41
	4/9/2013	<0.31
	4/15/2014	<0.31
	4/7/2015	<0.31
	4/13/2016	<0.313
MW-6D	4/26/2011	<0.33
	4/10/2012	<0.41
	4/10/2012 DUP	<0.41
	4/9/2013	<0.31
	4/9/2013 DUP	<0.31
	4/15/2014	<0.31
	4/15/2014 DUP	<0.31
	4/6/2015	<0.31
	4/6/2015 DUP	<0.31
	4/13/2016	<0.313
	4/13/2016 DUP	<0.313
MW-12S	May-99	—
	Feb-02	0.32
	May-02	0.30
	Aug-02	0.45
	Nov-02	0.22 J
	Feb-03	—
	May-03	—
	4/26/2011	<0.33
	4/10/2012	<0.41
	4/9/2013	<0.31
	4/15/2014	<0.31
	4/7/2015	<0.31
	4/13/2016	<0.313

Table 3
Groundwater Analytical Results
Taylor Lumber and Treating

Well ID	Date of Measurement	Pentachlorophenol (µg/L)
MW-13S	May-99	—
	Feb-02	0.25
	May-02	0.25
	Aug-02	2.0
	Nov-02	2.6 J
	Feb-03	<0.32
	May-03	<0.56
	4/26/2011	<0.33
	4/10/2012	<0.41
	4/9/2013	<0.31
	4/15/2014	<0.31 J2
	4/6/2015	<0.31
	4/13/2016	<0.313 J2
MW-15S	May-99	—
	Feb-02	220
	May-02	220
	Aug-02	250
	Nov-02	210
	Feb-03	130
	May-03	190
	4/26/2011	12
	4/10/2012	15 J4, J3
	4/9/2013	18
	4/15/2014	13
	4/7/2015	12
	4/12/2016	4.19 J
MW-16S	May-99	—
	Feb-02	10
	May-02	15
	Aug-02	28
	Nov-02	21 J
	Feb-03	11
	May-03	11
	4/26/2011	11
	4/26/2011 DUP	11
	4/10/2012	5.8
	4/10/2012 DUP	8.7
	4/9/2013	8.0
	4/9/2013 DUP	9.3
	4/15/2014	5.0
	4/15/2014 DUP	5.4
	4/7/2015	5.3
	4/7/2015 DUP	4.6
	4/13/2016	3.20 J
	4/13/2016 DUP	3.07 J

Please refer to notes at end of table.

Table 3
Groundwater Analytical Results
Taylor Lumber and Treating

Well ID	Date of Measurement	Pentachlorophenol (µg/L)
MW-19S	May-99	—
	Feb-02	—
	May-02	—
	Aug-02	0.067
	Nov-02	<0.32
	Feb-03	<0.32
	May-03	0.061
	4/27/2011	<0.33
	4/11/2012	<0.41
	4/10/2013	<0.31
	4/16/2014	<0.31
	4/8/2015	<0.31
	4/12/2016	<0.313 J2
MW-20S	May-99	—
	Feb-02	—
	May-02	—
	Aug-02	0.013 J
	Nov-02	<0.32
	Feb-03	<0.32
	May-03	0.027 J
	4/27/2011	<0.33
	4/11/2012	<0.41
	4/10/2013	<0.31
	4/16/2014	<0.31 J2
	4/8/2015	<0.31
	4/12/2016	<0.313
MW-25S	12/19/2005	424
	12/19/2005 DUP	396
	4/27/2011	230
	4/11/2012	200
	4/10/2013	240
	4/15/2014	290
	4/7/2015	210
	4/13/2016	158
MW-103S	May-99	5.6
	Feb-02	6.4
	May-02	7.0
	Aug-02	12
	Nov-02	4.7 J
	Feb-03	5.0
	May-03	20
	4/27/2011	1.6
	4/11/2012	1.4
	4/10/2013	2.3
	4/16/2014	0.56 J
	4/7/2015	0.92 J
	4/12/2016	1.36 J

Please refer to notes at end of table.

Table 3
Groundwater Analytical Results
Taylor Lumber and Treating

Well ID	Date of Measurement	Pentachlorophenol (µg/L)
PZ-101	May-99	<25
	Feb-02	0.14
	May-02	0.15
	Aug-02	0.14
	Nov-02	1.1 J
	Feb-03	—
	May-03	0.067
	4/27/2011	<0.33
	4/11/2012	<0.41
	4/10/2013	<0.31 J3,J2
	4/16/2014	<0.31
	4/8/2015	<0.31
	4/12/2016	<0.313
PZ-102	May-99	<25
	Feb-02	0.37
	May-02	0.30
	Aug-02	0.34
	Nov-02	0.13 J
	Feb-03	0.23 J
	May-03	<0.32
	4/27/2011	<0.33
	4/10/2012	<0.41
	4/9/2013	<0.31
	4/15/2014	<0.31
	4/8/2015	<0.31
	4/13/2016	<0.313
PZ-105	May-99	82 J
	Feb-02	3.5
	May-02	8.2
	Aug-02	17
	Nov-02	4.0 J
	Feb-03	0.77
	May-03	2.6
	4/26/2011	<0.33
	4/10/2012	<0.41
	4/9/2013	1.6
	4/16/2014	<0.31
	4/8/2015	<0.31
	4/12/2016	<0.313

Please refer to notes at end of table.

Table 3
Groundwater Analytical Results
Taylor Lumber and Treating

Well ID	Date of Measurement	Pentachlorophenol (µg/L)
South of Highway 18B		
MW-9S	May-99	<24
	Feb-02	<0.047
	May-02	<0.049
	Aug-02	<0.023
	Nov-02	<0.32
	Feb-03	<0.32
	May-03	<0.046
	4/26/2011	<0.33
	4/11/2012	<0.41
	4/10/2013	<0.31
	4/16/2014	<0.31
MW-10S	4/8/2015	<0.31
	4/14/2016	<0.313
	May-99	<26
	Feb-02	0.099
	May-02	0.13
	Aug-02	0.38
	Nov-02	0.18 J
	Feb-03	<0.32
	May-03	0.13
	4/27/2011	<0.33
	4/11/2012	<0.41
MW-24S	4/10/2013	<0.31
	4/16/2014	<0.31
	4/8/2015	<0.31
	4/14/2016	<0.313
	4/27/2011	<0.33
	4/11/2012	<0.41 J4, J3
East of Rock Creek Road		
MW-11S	4/10/2013	<0.31 J3, J2
	4/15/2014	<0.31
	4/7/2015	<0.31
	4/13/2016	<0.313
	May-03	0.18
	4/27/2011	0.87 J
	4/11/2012	<0.41
	Nov-02	<0.32
	Feb-03	<0.32
	Aug-02	0.36
	May-02	0.18

Please refer to notes at end of table.

Table 3
Groundwater Analytical Results
Taylor Lumber and Treating

Well ID	Date of Measurement	Pentachlorophenol (µg/L)
Residences		
RW-01	May-99	<25
	Feb-02	<0.045
	May-02	<0.049
	Aug-02	<0.046
	Nov-02	<0.32
	Feb-03	<0.045
	May-03	<0.046
	4/27/2011	<0.33
	4/11/2012	<0.41
	4/10/2013	<0.31
	4/16/2014	<0.31
	4/8/2015	<0.31
	4/13/2016	<0.313

Notes:

1. Sample dates for historical (pre-2005) data are not available; results available in month/year format only.
2. J = Detected value was below the lowest calibration point for the analysis; therefore, results are estimated.
3. J2 = Surrogate recoveries were outside control limits ; therefore, results are estimated.
4. J3 = The relative percent difference (RPD) is above the method limit.
5. J4 = The laboratory control sample or laboratory control sample duplicate is outside control limits.
6. – = Not Sampled
7. **BOLD** indicates analyte detected above method reporting limit.
8. DUP = Duplicate sample.

